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SOME CLINICAL FEATURES OF CORONARY
ARTERY DISEASE*

(ABSTRACT) **

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In the latter part of the eighteenth century, Edward Jenner first suggested the probable relationship between calcareous deposits in the coronary arteries and that "disorder of the breast" to which his contemporary, Heberden, gave the name "Angina Pectoris." Leyden, in 1884, gave an excellent description of coronary sclerosis and thrombosis, and for the first time satisfactorily correlated the clinical aspects and pathologic changes. During the past twenty years, there has been renewed interest in acute coronary obstruction. In the development of our knowledge concerning this condition, the paper of Obrastzow and Straschesko, in 1910, and the publications of J. B. Herrick, in 1912 and 1919, will stand, together with Leyden's account, as historic landmarks.

Arteriosclerosis of the coronary arteries, with the concomitant morbid changes in the heart, is numerically by far the most important of the affections which involve these vessels. Syphilis is seen almost exclusively in association with specific aortitis, and assumes clinical importance when the orifice of one or both coronaries becomes narrowed or obliterated. Embolism is rare. In a series of 3093 autopsies performed at the Presbyterian Hospital in the course of twenty-four years, this condition was met with but three times. The coronary lesions of rheumatic fever, for the present, are of interest chiefly to the pathologist.

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Each year, more people are dying from diseases of the heart. The rising mortality curve is due almost entirely to a greater number of deaths in persons over forty-five years of age. The increasing number of cardiac deaths recorded in older individuals may be explained in part by the fact that more are living to the "heart age"; in addition, the growing body of knowledge concerning cardiovascular conditions has resulted in more accurate diagnosis.

In order to determine whether affections of the coronary arteries are also showing a rising trend in their incidence, an analysis was made of the autopsy and clinical records of the Presbyterian Hospital during the ten year period, 1920 to 1929, inclusive. In the autopsy series, there was no distinct trend either up or downward. The evidence presented by this particular group of cases affords no support for the current impression that an increasing proportion of the population is dying of coronary artery disease. In the clinical series, during the same period, there was a fourfold increase. This discrepancy between post-mortem and bedside records may well be explained by the fact that in recent years many of the milder, non-fatal and less typical forms of coronary disease are being recognized with increasing frequency.

Clinically, the cases of coronary sclerosis (exclusive of thrombosis) may be divided according to their presenting symptoms into four groups: (1) those with cardiac insufficiency; (2) those with cardiac pain; (3) those with digestive disturbances; (4) those without symptoms, and sometimes without signs—the latent type. Obviously, there are many mixed cases with symptoms from more than one group.

Thrombosis of a coronary artery may be considered as an episode in the natural history of coronary sclerosis, for a thrombus almost invariably forms in a vessel already the seat of atheroma or calcification. There are mild and atypical cases, many of which are undoubtedly overlooked. That such cases truly represent a thrombotic closure is often borne out by serial electrocardiographic studies,

in which successive changes appear in the records; or by the occurrence, months or years later, of a more severe and perhaps fatal attack.

Following thrombosis of a coronary artery, the immediate mortality in the first attack, according to a recent study, is sixteen per cent. In patients having two or more attacks, the time interval between the first and second attack is less than one year in about half the cases. One patient remained in good health for seventeen years, to die at the end of this period following closure of another coronary branch. Mild initial symptoms and a rapid rate of recovery tend to indicate a favorable immediate outcome. But in any given instance, it is extremely difficult to prognosticate as to the liability to recurrence, or to estimate the probable expectancy of life.